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(54)【発明の名称】 毛穴ケア用の洗浄料

(57)【要約】

【課題】 皮脂除去作用を高め、毛髪の維持と脱毛の防止に有益な洗浄剤を提供する。

【解決手段】 毛髪或いは頭皮用の洗浄剤に 1) ヴァニリルアルキルエーテルと 2) 末梢血管拡張作用を有する物質から選ばれる 1 種乃至は 2 種以上とを含有させる。

## 【特許請求の範囲】

【請求項1】 1) ヴァニリルアルキルエーテルと2) 末梢血管拡張作用を有する物質から選ばれる1種乃至は2種以上とを含有することを特徴とする、洗浄剤。

【請求項2】 末梢血管拡張作用を有する物質が、テルベン、ステロイド及びそれらの配糖体であることを特徴とする、請求項1に記載の洗浄剤。

【請求項3】 テルベン及びステロイドがメントール、チモール、ウルソール酸、オレアノール酸、エクジソン、ポリボルスチロン、エストラジオール及びエストリオールである、請求項1又は2に記載の洗浄剤。

【請求項4】 更に、ヒドロキシ酸及び／又はその塩を含有することを特徴とする請求項1～3何れか1項に記載の洗浄剤。

【請求項5】 ヒドロキシ酸が $\alpha$ -ヒドロキシ酸であることを特徴とする、請求項4に記載の洗浄剤。

【請求項6】  $\alpha$ -ヒドロキシ酸が乳酸であることを特徴とする、請求項5に記載の洗浄剤。

【請求項7】 洗浄剤が頭髪用のものであることを特徴とする、請求項1～6何れか1項に記載の洗浄剤。

【請求項8】 毛穴の皮脂の除去作用を有することを特徴とする、請求項1～7何れか1項に記載の洗浄剤。

【請求項9】 頭皮クレンジング料であることを特徴とする、請求項1～8何れか1項に記載の洗浄料。

## 【発明の詳細な説明】

## 【0001】

【発明の属する技術分野】 本発明は、洗浄剤に関し、更に詳細にはシャンプー等の頭髪用の洗浄剤に好適な洗浄剤に関する。

## 【0002】

【従来の技術】 戦後とバブルの消費生活社会を経て、現代人の食生活は著しく変化した。その変化を概括すれば、西洋化が著しく、脂肪或いは動物性蛋白の摂取量が激増したことが挙げられ、かかる食生活の変化に伴い、現代人の生理機能も著しく変化し、この様な状況に起因する新たな疾病が、或いは疾病に至らないものの非健康状態が生まれている。この様な健康上の不都合な事象としては、循環器系疾患の急増、脳機能障害の増大、脂質代謝異常に伴う様々な不都合事象の発生が挙げられる。この内、循環器系疾患の急増、脳機能障害の増大は医薬分野の課題となっているが、化粧料の分野に於いては、脂質代謝異常に伴う不都合事象の発生が大きな課題となっている。この様な課題としては、具体的には、脂質代謝亢進による、化粧崩れの増大や毛成長の阻害などの問題が挙げられる。取り分け、脱毛の問題は、男性に於いては深刻な問題であり、ミノキシジル製剤の爆発的なヒットを例に挙げるまでもない事であろう。この様な状況を背景に毛周辺組織より過剰或いは劣化した代謝脂質を除去する技術の開発が望まれていた。更に、このような部位に於いては、末梢血管の血流が阻害されており、

このような血行の不良も脱毛を促進する要因であるといわれているので髪の毛の手入れの見地からは、末梢血管を拡張し抹消血流を改善することは好ましいことと考えられている。しかしながら、脂質や汚れを皮膚より除去する場合に於いて、この様な血流量を増大させる物質が共存が脂質の除去を助けることは全く知られていなかった。又、末梢血管を拡張する物質のこの様な作用をヴァニリルブチルエーテルなどのヴァニリルアルキルエーテルが増強させることも全く知られていなかった。

【0003】 一方、人体より代謝された脂質を除去する手段としては、通常の石鹼やアルキル硫酸塩等のアニオン界面活性剤での洗浄やクレンジングクリームなどの油性クリームによる除去、粘着性シートによる吸着除去などが既に知られている技術であるが、皮脂を特異的に溶解し除去するような成分は知られておらず、通常の洗浄剤にこの様な皮脂溶解性分を含有させて、更に皮脂除去作用を高めた洗浄剤は全く知られていなかった。本発明者は、ジブロビレングリコールとイソブレングリコールの組み合わせによって、この様な洗浄剤の剤形化が可能であることを見いだしている。又、この様な成分と末梢血流を改善する成分と組み合わせることにより、この様な溶解・除去作用を向上させうることは、行われておらず、想到され得なかった。加えて、かかる末梢血管を拡張させる成分のこの様な働きを増強させることも全く知られていなかった。

## 【0004】

【発明が解決しようとする課題】 本発明はこの様な状況下でされたものであり、皮脂除去作用を高め、健康な毛髪と皮膚の維持と脱毛の防止に有益な洗浄剤を提供することを課題とする。

## 【0005】

【課題の解決手段】 本発明者らは、この様な状況に鑑みて、皮脂除去作用を高め、毛髪の維持と脱毛の防止に有益な洗浄剤を提供すべく、鋭意研究努力を重ねた結果、ジブロビレングリコールやイソブレングリコール類にこの様な特性を見いだした。更なる検討を加えた結果、このものの作用を、ヴァニリルアルキルエーテルと末梢血流を増大する成分を組み合わせることにより、高めることができることを見いだし、発明を完成させるに至った。即ち、本発明は以下に示す技術に関するものである。

(1) 1) ヴァニリルブチルエーテルと2) 末梢血管拡張作用を有する物質から選ばれる1種乃至は2種以上とを含有することを特徴とする、洗浄剤。

(2) 末梢血管拡張作用を有する物質が、テルベン、ステロイド及びそれらの配糖体であることを特徴とする、(1)に記載の洗浄剤。

(3) テルベン及びステロイドがメントール、チモール、ウルソール酸、オレアノール酸、エクジソン、ポリボルスチロン、エストラジオール及びエストリオールで

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ある、(1)又は(2)に記載の洗浄剤。

(4)更に、ヒドロキシ酸及び／又はその塩を含有することを特徴とする(1)～(3)何れか1項に記載の洗浄剤。

(5)ヒドロキシ酸が $\alpha$ -ヒドロキシ酸であることを特徴とする、(4)に記載の洗浄剤。

(6) $\alpha$ -ヒドロキシ酸が乳酸であることを特徴とする、(5)に記載の洗浄剤。

(7)洗浄剤が頭髪用のものであることを特徴とする、(1)～(6)何れか1項に記載の洗浄剤。

(8)毛穴の皮脂の除去作用を有することを特徴とする、(1)～(7)何れか1項に記載の洗浄剤。

(9)頭皮クレンジング料であることを特徴とする、(1)～(8)何れか1項に記載の洗浄料。

【0006】

【発明の実施の形態】(1)本発明の洗浄剤の必須成分であるヴァニリルアルキルエーテル

本発明の化粧料は、ヴァニリルアルキルエーテルを含有することを特徴とする。ヴァニリルブチルエーテルなどのヴァニリルアルキルエーテルは、化粧料の分野に於いては、香料成分として既に使用されている。本発明に於ける、ヴァニリルアルキルエーテルのアルキル基としては、炭素数1～8の直鎖、分岐乃至は環状構造を有するものが好ましく、具体的には、例えば、メチルエーテル、エチルエーテル、プロピルエーテル、イソブロピルエーテル、ノルマルブチルエーテル、イソブチルエーテル、セカンダリーブチルエーテル、ターシャリーブチルエーテル、ベンチルエーテル、シクロベンチルエーテル、ヘキシルエーテル、シクロヘキシルエーテル、シクロベンチルメチルエーテル、オクチルエーテル、イソオクチルエーテルなどが好ましく例示できる。これらのエーテルは、ヴァニリルアルコールと、対応するアルコールと塩化チオニルのようなハロゲン化剤とから誘導されたアルキルハライドとを、アルカリ存在下縮合することにより得ることが出来るが、多くのものが市販されており、これを利用することも出来る。更に、これらのヴァニリルアルキルエーテルは、塩基と塩を生成するが、この様な塩も本発明のヴァニリルエーテルの範囲に属する。かかる塩基としてはナトリウムやカリウムのようなアルカリ金属塩、カルシウムやマグネシウムなどのアルカリ土類金属塩、アンモニウム塩、有機アミン塩、塩基性アミノ酸塩などが例示できる。この様なヴァニリルアルキルエーテルの中で特に好ましいものはヴァニリルノルマルブチルエーテル(以下、単にヴァニリルブチルエーテルと称することもある。)及び／又はその塩である。これはこのものの皮脂溶解補助作用が特に優れているからである。又、この様な香料成分が温感付与作用を有しており、温感付与剤としても使用されている。しかしながら、皮脂除去作用の増強剤としての作用は知られていないし、この様な目的で使用されてもいない。このもの

の化粧料における使用は既に行われていることであり、その入手は市販されているが故に用意であり、本発明の洗浄剤に於いては、この様な市販品を使用することができる。本発明の洗浄剤に於いては、かかるヴァニリルアルキルエーテルは、皮脂溶解作用の増強剤として作用するが、この様な使用過程に於いて、温感付与作用を発揮する。従って、皮脂除去用の洗浄在中に温感不要作用を目的で含有させる技術も本発明の技術的範囲に属する。

本発明の洗浄剤に於いては、ヴァニリルアルキルエーテルは、唯一種でも二種以上を組み合わせてもちいることが出来、本発明の洗浄剤における、ヴァニリルアルキルエーテルの好ましい含有量は、洗浄料全量に対して、総量で0.005～5重量%であり、更に好ましくは0.01～1重量%である。これは少なすぎると、皮脂除去増強作用が得られない場合があり、多すぎると過剰な温感を与え、感触的に好ましくない場合があるからである。

【0007】(2)本発明の洗浄剤の必須成分である、末梢血管拡張作用を有する物質

20 本発明の洗浄剤は、末梢血管拡張作用を有する物質を必須成分として含有することを特徴とする。ここで、本発明でいう末梢血管を拡張させる物質とは、通常医薬の分野で定義している末梢血管拡張剤とは異なり、例えば、ハムスターの口腔内粘膜上の微細血管を用いたスクリーニングで5%程度の血流量の増加が観察される程度のものでよい。この様な成分としては、例えば、メントール(11%の増加)、チモール(8%増加)、ウルソール酸ナトリウム(7%)、オレアノール酸ナトリウム(6%増加)等のテルペニ類、エストラジオール(7%増加)、ポリポルステロン(11%増加)、エクジステロン(6%増加)等のステロイド、カブサイシン(12%増加)、グリセロールモノメンチルエーテル(8%増加)、メントールグルコシド(6%増加)、ウルソール酸グルコシド(5%増加)等のテルペニの配糖体、エクジステロングルコシド(5%増加)等のステロイドの配糖体などが好ましく例示できる。また、これらの成分を高濃度に含有する生薬エキス、例えば、ミントエキス、ジュニバーベリーエキス、ユーカリエキス、トウガラシエキス、ローズマリーエキスなども本発明でいう末梢血管拡張作用を有する物質に属する。

40 本発明の洗浄料に於いては、これらの成分は唯一種のみを含有させることもできるし、2種以上を組み合わせて含有させることもできる。本発明の洗浄剤における、かかる成分の好ましい含有量は、化粧料全量に対して、総量で0.01～10重量%であり、更に好ましくは、0.05～5重量%である。

【0008】(3)本発明の洗浄料に好ましく含有されるヒドロキシ酸及び／又はその塩

本発明の洗浄料は、ヒドロキシ酸及び／又はその塩を含有することが好ましい。これは、この様な成分が皮膚を

軟化させ、皮膚より皮脂汚れが離脱しやすくさせる作用を有するからである。かかるヒドロキシ酸としては、乳酸やグリコール酸、リンゴ酸等の $\alpha$ -ヒドロキシ酸、 $\beta$ -乳酸等の $\beta$ -ヒドロキシ酸等が例示でき、これらの内では $\alpha$ -ヒドロキシ酸がより好ましく、乳酸とグリコール酸が特に好ましく例示できる。又、これらヒドロキシ酸の塩としては、通常化粧料で使用されている塩であれば特段の限定を受けずに使用でき、例えば、ナトリウム、カリウムなどのアルカリ金属塩、カルシウム、マグネシウムなどのアルカリ土類金属塩、アンモニウム塩、トリエタノールアミン塩、ジエタノールアミン塩、トリエチルアミン塩等の有機アミン塩、リジン塩やアルギニン塩等の塩基性アミノ酸塩などが好ましく例示できる。本発明の洗浄料に於いては、これらヒドロキシ酸及び/又はその塩は唯一種を含有することも出来るし、二種以上を組み合わせて含有することも出来る。これらヒドロキシ酸及び/又はその塩の、本発明の洗浄料に於ける好ましい含有量は、洗浄料全量に対して、総量で0.01~10重量%であり、更に好ましくは0.05~2重量%である。

#### 【0009】(4) 本発明の洗浄料

本発明の洗浄料は、上記ヴァニリルブチルエーテルに代表されるヴァニリルアルキルエーテルと末梢血管を拡張する作用を有する物質とを含有し、任意の成分としてヒドロキシ酸及び/又はその塩を好ましくは含有することを特徴とする。ここで、本発明で言う洗浄料とは、生体上に残留していることが好ましくない、過剰に分泌された皮脂、古くなった角層などの成分や汚れ、それらの複合体などを除去する目的で使用される化粧料を意味し、例えば、シャンプー、リンス等の頭部洗浄料、石鹼やボディーシャンプーなどの体部洗浄料、洗顔料や洗顔石鹼などの顔部洗浄料などが例示できる。これの内、本発明の洗浄料としては、本発明の必須成分の組み合わせが、特に頭皮或いは頭部毛穴周辺に於ける皮脂の除去作用を増強する作用に優れることから、この様な頭部用の洗浄料として使用することが特に好ましい。勿論、この様な場合に於いては、この様な皮脂溶解作用を有する、ジプロビレングリコールやイソブレングリコールなどを含有させることができ好ましく、この様な成分の好ましい含有量としては、洗浄料全量に対して、総量で1~30重量%、更に好ましくは5~20重量%が例示できる。本発明の洗浄料は、その作用として、従来のシャンプーなどのアニオン性界面活性剤や非イオン性界面活性剤等の界面活性剤のみを洗浄料の有効成分とするものでは落としにくい、前記頭皮或いは毛穴付近に存在する皮脂を落とす作用を有する。本発明の洗浄料は、頭部用の洗浄料として用いる場合、前記界面活性剤とともにシャンプーなどに製剤化して使用することも出来るし、非イオン性界面活性剤などとともにプレシャンプー用のクレンジングとして製剤化することもできる。この内特に好ましいもの

は、プレシャンプー用のクレンジングである。これは、本発明の洗浄料の成分が、予め皮脂や油性汚れを落としておくことにより、シャンプーが含有している界面活性剤の洗浄能力を著しく高めることが出来るためである。この様なプレシャンプー用のクレンジング剤形にするには、本発明の洗浄料の好ましい成分であるジプロビレングリコールやイソブレングリコールなどの他科アルコール類や皮脂汚れとのなじみの良い非イオン界面活性剤とともに含有することが好ましい。この様な非イオン性界面活性剤としては、例えば、ポリグリセリンの脂肪酸エステルが好ましく例示できる。この場合のポリグリセリンの好ましい平均重合度は4~20、更に好ましくは7~15が例示できる。又、脂肪酸残基としては、ラウリン酸残基が特に好ましく例示できる。これら非イオン界面活性剤の好ましい含有量は、0.01~20重量%、更に好ましくは0.05~10重量%が例示できる。これは、多すぎるとべたつくなど使用感を損なう場合があり、少なすぎると添加効果が得られない場合があるからである。

【0010】本発明の洗浄料には、上記の成分以外にも、通常化粧料で使用されている任意成分を、本発明の効果を損ねない範囲に於いて、含有することが出来る。この様な任意成分としては、例えば、スクワラン、ワセリン、マイクロクリスタリンワックス等の炭化水素類、ホホバ油、カルナウバワックス、オレイン酸オクチルドデシル等のエステル類、オリーブ油、牛脂、椰子油等のトリグリセライト類、ジメチコンやフェメチコン、アモジメチコン等のシリコーン類、ステアリン酸、オレイン酸、リチノレイン酸等の脂肪酸、オレイルアルコール、ステアリルアルコール、オクチルドデカノール等の高級アルコール、スルホコハク酸エステルやポリオキシエチレンアルキル硫酸ナトリウム等のアニオン界面活性剤類、アルキルアノニウム塩等のカチオン界面活性剤類、ジアルキルアノニウム塩等のカチオン界面活性剤類、ソルビタン脂肪酸エステル、脂肪酸モノグリセライド、これらのポリオキシエチレン付加物、ポリオキシエチレンアルキルエーテル、ポリオキシエチレン脂肪酸エステル等の非イオン界面活性剤類、ポリエチレングリコール、グリセリン、1,3-ブタンジオール等のジプロビレングリコールやイソブレングリコール以外の多価アルコール類、キサンタンガム、ガーガム、カルボキシビニルポリマー、カチオン化セルロースエーテル、カチオン化グアガムなどの増粘・ゲル化剤、酸化防止剤、紫外線吸収剤、香料、色材、防腐剤、粉体、メントールなどの清涼成分等が好ましく例示できる。これらの成分を常法に従って処理することにより、本発明の洗浄料は製造することが出来る。勿論、上記任意成分とともに体部洗浄料や洗顔用の洗浄料に製剤化することも出来、この様な洗浄料も、皮膚に於ける過剰分泌皮脂を除去しうることから、本発明の技術的範囲に属する。

## 【0011】

【実施例】以下に、実施例を挙げて、本発明について更に詳細に説明を加えるが、本発明が、これら実施例にのみ限定を受けないのは言うまでもない。

【0012】<実施例1>以下に示す処方に従って、本発明の洗浄料である、プレシャンプー用のクレンジング1を作成した。即ち、処方成分を70°Cで加熱、攪拌して可溶化し、攪拌冷却してプレシャンプー用のクレンジング1を得た。別途、このもののヴァニリルブチルエーテルを全て水に置換した比較例1、L-メントールとトウガラシチンキとを水に置換した比較例2及びヴァニリルブチルエーテル、L-メントールとトウガラシチンキとを水に置換した比較例3も作成した。これらを用いて、脂性の人の頭皮より、脂質を除去する検討を行った。

ジブロビレンジリコール	15	重量部
エタノール	15	重量部
カルボキシビニルポリマー	0.5	重量部
10%苛性カリ水溶液	2	重量部
シリコーンエマルジョン	3	重量部
L-メントール	1	重量部
キサンタンガム	0.1	重量部
乳酸ナトリウム	0.1	重量部
デカグリセリンラウリン酸エステル	10	重量部
トウガラシチンキ	1	重量部
ヴァニリルブチルエーテル	0.1	重量部
水	52	2重量部

【0013】<実施例2>下記に示す、処方のシャンプーを用いて、上記実施例1のクレンジング1で前処理を行ってシャンプーした場合と、前処理無しでシャンプーした場合の皮脂汚れの残り方を観察した。脂性のバナラの頭の半分はクレンジング1で前処理を行い、残り半分

(シャンプー処方)

ポリオキシエチレンラウリル硫酸ナトリウム	10	重量部
ポリオキシエチレンヤシ油脂肪酸モノエタノールアミド	5	重量部
ラウリル硫酸ナトリウム	2	重量部
1,3-ブタンジオール	10	重量部
水	73	重量部

【0014】<実施例3>以下に示す処方に従って、本発明の洗浄料である、プレシャンプー用のクレンジング2を作成した。即ち、処方成分を70°Cで加熱、攪拌して可溶化し、攪拌冷却してプレシャンプー用のクレンジング★

イソブレンジリコール	15	重量部
エタノール	15	重量部
カルボキシビニルポリマー	0.5	重量部
10%苛性カリ水溶液	2	重量部
シリコーンエマルジョン	3	重量部
L-メントール	1	重量部
キサンタンガム	0.1	重量部
乳酸ナトリウム	0.1	重量部
デカグリセリンラウリン酸エステル	10	重量部

\*た。即ち、頭の半分を本発明のクレンジング1を5m1通りかけ、良くマッサージした後、洗い流した。同様にして残りの頭部の半分を比較例1で処理し、これらの処理後の写真をビデオマイクロスコープで撮影した。図1にクレンジング1で処理した部位の写真を示す。図2に比較例1で処理した部位の写真を、図3に比較例2で処理した後の写真を、図4に比較例3で処理した後の写真を示す。これらを比較すると、本発明の洗浄料である、クレンジング1による処理が有意に脂質汚れを除去していることが判る。これは、本発明の必須成分である一般式(I)に表される化合物と末梢血管拡張作用を有する物質であるL-メントールとの相乗作用によるものであることもわかる。又、本発明の洗浄料には好ましい温感が感じられた。

15 重量部
15 重量部
0.5 重量部
2 重量部
3 重量部
1 重量部
0.1 重量部
0.1 重量部
10 重量部
1 重量部
0.1 重量部
52 2重量部

※分は前処理をせずに、下記シャンプーで引き続き洗髪し、ビデオマイクロスコープで観察を行った。図5に前処理した後シャンプーしたものの写真を、図6に前処理無しで洗髪したものの写真を示す。これより、本発明のプレシャンプー用のクレンジング脂質除去効果が判る。

★ング2を得た。実施例1と同様に処理後の写真をビデオマイクロスコープで撮影した。このものは実施例1と同様の脂質除去効果を有していた。

9

トウガラシチンキ  
ヴァニリルブチルエーテル  
水

【0015】<実施例3>以下に示す処方に従って、本発明の洗浄料である、プレシャンプー用のクレンジング3を作成した。即ち、処方成分を70°Cで加熱、攪拌して可溶化し、攪拌冷却してプレシャンプー用のクレンジ\*

ソルビット  
エタノール  
カルボキシビニルポリマー  
10%苛性カリ水溶液  
シリコーンエマルジョン  
L-メントール  
キサンタンガム  
グリコール酸カリウム  
デカグリセリンラウリン酸エステル  
トウガラシチンキ  
ヴァニリルブチルエーテル  
水

【0016】<実施例4>以下に示す処方に従って、本発明の洗浄料である、シャンプー1を作成した。即ち、処方成分を70°Cで加熱、攪拌して可溶化し、攪拌冷却してシャンプー1を得た。このものの洗髪後の写真ビデオマイクロスコープで撮影した。このものは通常のシャン

イソブレンジグリコール  
乳酸ナトリウム  
ポリオキシエチレンラウリル硫酸ナトリウム  
ポリオキシエチレンヤシ油脂肪酸モノエタノールアミド  
ラウリル硫酸ナトリウム  
1, 3-ブタジオール  
ユーカリエキス  
ヴァニリルブチルエーテル  
水

【0017】<実施例5>実施例1の本発明の洗浄剤中の乳酸ナトリウムを水に置換して本発明の洗浄剤を作成した。このものは、優れた頭皮部の皮脂を除去する作用に優れていたが、実施例1の洗浄剤には及ばなかった。

【0018】

【発明の効果】本発明によれば、皮脂除去作用を高め、毛髪の維持と脱毛の防止に有益な洗浄剤を提供することができる。

【図面の簡単な説明】

【図1】 実施例1のクレンジング1で処理した結果を示す図である。 (図面代用写真)

1 重量部  
1 重量部  
5 1. 3 重量部

\*ング3を得た。実施例1と同様に処理後の写真をビデオマイクロスコープで撮影した。このものは実施例1と同様の脂質除去効果を有していた。

1 5 重量部  
1 5 重量部  
0. 5 重量部  
2 重量部  
3 重量部  
1 重量部  
0. 1 重量部  
0. 1 重量部  
1 0 重量部  
1 重量部  
0. 3 重量部  
5 2 重量部

20※ンプーより脂質除去作用にすぐれるものの、プレシャンプー処理をした後シャンプーしたものには及ばなかった。また、乳酸ナトリウムを水に置換した比較例4はこのものよりも更に脂質除去作用は劣っており、ヒドロキシ酸の添加効果は確かめられた。

5 重量部  
0. 5 重量部  
1 0 重量部  
5 重量部  
2 重量部  
5 重量部  
0. 1 重量部  
0. 1 重量部  
7 2. 3 重量部

【図2】 実施例1の比較例1で処理した結果を示す図である。 (図面代用写真)

【図3】 実施例1の比較例2で処理した結果を示す図である。 (図面代用写真)

【図4】 実施例1の比較例3で処理した結果を示す図である。 (図面代用写真)

40 【図5】 実施例2前処理した後シャンプー結果を示す図である。 (図面代用写真)

【図6】 実施例2前処理なしでシャンプー結果を示す図である。 (図面代用写真)

【図1】



【図2】



【図3】



【図4】



【図5】



【図6】



フロントページの続き

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EE21  
4H003 AB27 AB31 AC03 AC13 DA02  
DB01 EA21 EB04 EB06 EB07  
EB08 EB30 EB37 EB41 EB43  
EB46 ED02 FA21 FA33

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CLAIMS

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[Claim(s)]

[Claim 1] 1) The cleaning agent characterized by containing one sort chosen from the matter which has VANIRIRU alkyl ether and 2 teleangiectasia operation, or two sorts or more.

[Claim 2] The cleaning agent according to claim 1 with which the matter which has a teleangiectasia operation is characterized by being a terpene, steroids, and those glycosides.

[Claim 3] The cleaning agent according to claim 1 or 2 a terpene and whose steroid are menthol, Timor, ursolic acid, oleanolic acid, ecdysone, a PORIPORU sterone, estradiol, and estriol.

[Claim 4] furthermore, claims 1-3 characterized by containing a hydroxy acid and/or its salt -- a cleaning agent given in any or the 1st term.

[Claim 5] The cleaning agent according to claim 4 characterized by a hydroxy acid being an alpha-hydroxy acid.

[Claim 6] The cleaning agent according to claim 5 characterized by alpha-hydroxy acid being a lactic acid.

[Claim 7] claims 1-6 characterized by a cleaning agent being for the hairs -- a cleaning agent given in any or the 1st term.

[Claim 8] claims 1-7 characterized by having a removal operation of the sebum of pore -- a cleaning agent given in any or the 1st term.

[Claim 9] the scalp -- claims 1-8 characterized by being a charge of cleansing cream -- the charge of washing given in any or the 1st term.

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[Translation done.]

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## DETAILED DESCRIPTION

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### [Detailed Description of the Invention]

#### [0001]

[Field of the Invention] This invention relates to a detail further about a cleaning agent at the suitable cleaning agent for the cleaning agent for the hairs, such as a shampoo.

#### [0002]

[Description of the Prior Art] Eating habits of a man of today changed remarkably through the consumption-habits society of the postwar period and a bubble. the new illness which it is mentioned that Westernization was remarkable and the intake of a fat or animal albumin increased rapidly, and physiological function of a man of today also changes remarkably with change of these eating habits, and originates in such a situation if the change is summarized -- or although it does not result in the illness, non-health condition is born. As an inconvenient event on such health, rapid increase of a circulatory system disease, increase of a cerebral function failure, and generating of various inconvenient events by which it is accompanied unusually [ lipid metabolism ] are mentioned. Among this, although rapid increase of a circulatory system disease and increase of a cerebral function failure have been the technical problem of a physic field, in the field of cosmetics, generating of the inconvenient event by which it is accompanied unusually [ lipid metabolism ] has been a big technical problem. Specifically as such a technical problem, problems by lipid metabolism rise, such as increase of messy makeup and inhibition of hair growth, are mentioned. A depilatory problem is a serious problem in a male, and will especially be not mentioning the explosive hit of minoxidil pharmaceutical preparation as an example.

Development of the technique of removing an excess or the metabolic turnover lipid which deteriorated from a hair circumference organization against the background of such a situation was desired. Furthermore, in such a part, the blood flow of a peripheral vessel is checked and it is considered to be a desirable thing to extend a peripheral vessel from the standpoint of care and cleaning of the hair of hair, since it is said that it is the factor in which the defect of such circulation also promotes depilation, and to improve a deletion blood flow. However, when a lipid and dirt were removed from the skin, it was not known at all that coexistence will help [ the matter which increases such a blood stream ] removal of a lipid. Moreover, it was not known at all that VANIRIRU alkyl ether, such as VANIRIRU butyl ether, will reinforce such an operation of the matter which extends a peripheral vessel, either.

[0003] Although removal by oily creams, such as washing with anionic surface active agents, such as usual soap and alkyl sulfate, and cleansing cream, the adsorption treatment by the adhesive sheet, etc. are the techniques already known as a means to, remove the lipid metabolized from the body on the other hand A component which dissolves specifically and removes sebum was not known, the usual cleaning agent was made to contain such sebum dissolution nature, and the cleaning agent which raised the sebum removal operation further was not known at all. this invention person has found out that dosage-forms-izing of such a cleaning agent is possible with the combination of dipropylene glycol and an isoprene glycol. Moreover, by combining with such a component and the component which improves a peripheral blood style, raising such a dissolution / removal operation and getting is not performed, and it could not hit on an idea. In addition, reinforcing such work of the component to which this peripheral vessel is made to extend was not known at all, either.

#### [0004]

[Problem(s) to be Solved by the Invention] This invention is carried out the sake such under a situation, and a sebum removal operation is raised and let it be a technical problem to provide healthy hair, maintenance of the skin, and depilatory prevention with a useful cleaning agent.

#### [0005]

[Means for Solving the Problem] That a sebum removal operation should be raised in view of such a situation, and maintenance of hair and depilatory prevention should be provided with a useful cleaning agent, this invention persons found out such a property to dipropylene glycol or isoprene glycols, as a result of stepping up research efforts wholeheartedly. As a result of adding the further examination, by combining the component which increases VANIRIRU alkyl ether and a peripheral blood style in an operation of this thing, it finds out that it can raise and came to complete invention. That is, this invention relates to the technique shown below.

- (1) The cleaning agent characterized by containing one sort chosen from 1 VANIRIRU butyl ether and the matter which has 2 teleangiectasia operation, or two sorts or more.
- (2) A cleaning agent given in (1) to which the matter which has a teleangiectasia operation is characterized by being a terpene, steroids, and those glycosides.
- (3) A cleaning agent given in (1) a terpene and whose a steroid are menthol, Timor, ursolic acid, oleanolic acid, ecdysone, a PORIPORU sterone, estradiol, and estriol, or (2).
- (4) A cleaning agent given in (1) – (3) any 1 term furthermore characterized by containing a hydroxy acid and/or its salt.
- (5) A cleaning agent given in (4) characterized by a hydroxy acid being an alpha-hydroxy acid.
- (6) A cleaning agent given in (5) characterized by alpha-hydroxy acid being a lactic acid.
- (7) A cleaning agent given in (1) – (6) any 1 term characterized by a cleaning agent being for the hairs.
- (8) A cleaning agent given in (1) – (7) any 1 term characterized by having a removal operation of the sebum of pore.
- (9) the scalp -- the charge of washing given in (1) – (8) any 1 term characterized by being a charge of cleansing cream.

[0006]

[Embodiment of the Invention] (1) The cosmetics of VANIRIRU alkyl ether this invention which is the indispensable component of the cleaning agent of this invention are characterized by containing VANIRIRU alkyl ether. VANIRIRU alkyl ether, such as VANIRIRU butyl ether, is already used as a perfume component in the field of cosmetics. Methyl ether, ethyl ether, propyl ether, isopropyl ether, normal butyl ether, isobutyl ether, secondary butyl ether, and tertiary butyl ether, the pentyl ether, the cyclopentyl ether, the hexyl ether, the cyclohexyl ether, cyclopentyl methyl ether, the octyl ether, the iso octyl ether, etc. can specifically [ as an alkyl group of the VANIRIRU alkyl ether in this invention what has the straight chain of carbon numbers 1-8 branching, or cyclic structure is desirable, and ] illustrate preferably. Although these ether can obtain the alkyl halide guided from VANIRIRU alcohol, corresponding alcohol, and a halogenating agent like a thionyl chloride by condensing under alkali existence, many things are marketed and it can also use this. Furthermore, although these VANIRIRU alkyl ether generates a base and a salt, such a salt also belongs to the range of the VANIRIRU ether of this invention. Alkaline-earth-metal salts, such as an alkali-metal salt like sodium or a potassium as this base, calcium, and magnesium, ammonium salt, an organic amine salt, a basic-amino-acid salt, etc. can be illustrated. Especially desirable things are VANIRIRU normal butyl ether (VANIRIRU butyl ether may only be called hereafter) and/or its salt in such VANIRIRU alkyl ether. Especially this is because the sebum dissolution auxiliary operation of this thing is excellent. Moreover, such a perfume component has the sense-of-heat grant operation, and is used also as a sense-of-heat grant agent. However, the operation as an enhancement agent of a sebum removal operation is not known, and even if used for such the purpose, it is not required. It is that use in the cosmetics of this thing has already been performed, and although that acquisition is marketed therefore, it is preparation, and it can use such a commercial item in the cleaning agent of this invention. In the cleaning agent of this invention, although this VANIRIRU alkyl ether acts as an enhancement agent of a sebum solvent action, it demonstrates a sense-of-heat grant operation in such a use process. Therefore, the technique of making the washing existence for sebum removal containing a sense-of-heat unnecessary operation for the purpose also belongs to the technical range of this invention. In the cleaning agent of this invention, even if VANIRIRU alkyl ether combines two or more sorts also by the species uniquely, it can have and it can be, and the desirable content of the VANIRIRU alkyl ether in the cleaning agent of this invention is 0.005 – 5 % of the weight in a total amount to the charge whole quantity of washing, and is 0.01 – 1 % of the weight still more preferably. If too few, sebum removal potentiation may not be obtained, if there is too much this, it will give the superfluous sense of heat, and it is because it may not be desirable in feel.

[0007] (2) The cleaning agent of matter this invention which has a teleangiectasia operation which is the indispensable component of the cleaning agent of this invention is characterized by containing the matter which has a teleangiectasia operation as an indispensable component. It is easy to be extent from which the increment

in about 5% of blood stream is observed by the screening using the detailed blood vessel on the membrane in the oral cavity of a hamster unlike the teleangiectasia agent which usually defines the matter to which the peripheral vessel as used in the field of this invention is made to extend here by the medicinal field. As such a component, for example Menthol (11% of increment), Timor (increment in 8%), Terpenes, such as ursolic acid sodium (7%) and oleanolic acid sodium (increment in 6%), Estradiol (increment in 7%), a PORIPORU sterone (increment in 11%), Steroids, such as ecdysterone (increment in 6%), capsaicin (increment in 12%), The glycoside of steroids, such as a glycoside of terpenes, such as the glycerol mono-menthyl ether (increment in 8%), a menthol glucoside (increment in 6%), and an ursolic acid glucoside (increment in 5%), and an ecdysterone glucoside (increment in 5%), etc. can illustrate preferably. Moreover, it belongs to the matter which has the teleangiectasia operation as used in the field of [ the crude drug extractives which contain these components in high concentration, for example, mint extractives, juniper berry extractives, eucalyptus extractives, capsici fructus extractives, rosemary extractives, etc. ] this invention. These components can also make only a seed able to contain uniquely and can also be made to contain in the charge of washing of this invention combining two or more sorts. The content with this desirable component in the cleaning agent of this invention is 0.01 – 10 % of the weight in a total amount to the cosmetics whole quantity, and is 0.05 – 5 % of the weight still more preferably.

[0008] (3) As for the charge of washing of the hydroxy acid preferably contained in the charge of washing of this invention, and/or its salt this invention, it is desirable to contain a hydroxy acid and/or its salt. This is because it has the operation sebum dirt makes it easy for such a component to soften the skin and to break away from the skin. As this hydroxy acid, beta-hydroxy acids, such as alpha-hydroxy acids, such as a lactic acid, and a glycolic acid, a malic acid, and beta-lactic acid, etc. can be illustrated, among these, alpha-hydroxy acid is more desirable and a lactic acid and a glycolic acid can illustrate preferably especially. Moreover, if it is the salt usually used by cosmetics as a salt of these hydroxy acids, it can be used, without receiving special limitation, for example, basic-amino-acid salts, such as organic amine salts, such as alkaline earth metal salts, such as alkali-metal salts, such as sodium and a potassium, calcium, and magnesium, ammonium salt, a triethanolamine salt, a diethanolamine salt, and a triethylamine salt, a lysine salt, and an arginine salt, etc. can illustrate preferably. In the charge of washing of this invention, these hydroxy acids and/or the salt of those can also contain a seed uniquely, and can also contain it combining two or more sorts. The desirable content in the charge of washing of this invention of these hydroxy acids and/or the salt of those is 0.01 – 10 % of the weight in a total amount to the charge whole quantity of washing, and is 0.05 – 2 % of the weight still more preferably.

[0009] (4) The charge of washing of charge this invention of washing of this invention is characterized by containing the VANIRIRU alkyl ether represented by the above-mentioned VANIRIRU butyl ether and the matter which has the operation which extends a peripheral vessel, and containing a hydroxy acid and/or its salt preferably as a component of arbitration. Here, the charge of washing said by this invention means the cosmetics used in order for remaining on a living body to remove components, such as sebum secreted superfluously, a horny layer which became old which is not desirable, dirt, those complex, etc., for example, charges of \*\*\*\* washing, such as charges of soma washing, such as charges of head washing, such as a shampoo and a rinse, soap, and a body shampoo, a charge of washing their face, and washing-their-face soap, etc. can be illustrated. Since it excels in the operation whose combination of the indispensable component of this invention reinforces a removal operation of the scalp or the sebum in the head pore circumference especially as a charge of washing of this invention among this, especially the thing to use as such a charge of washing for heads is desirable. Of course, it is desirable to make the dipropylene glycol which sets in such a case and has such a sebum solvent action, an isoprene glycol, etc. contain, and 5 – 20 % of the weight can be illustrated still more preferably one to 30% of the weight in a total amount to the charge whole quantity of washing as a content with such a desirable component. The charge of washing of this invention has the operation on which the sebum which exists in said scalp or near pore is dropped. [ from which it is hard to drop only surfactants, such as anionic surfactants, such as the conventional shampoo, and a nonionic surfactant, to what is made into the active principle of the charge of washing as the operation ] When using as a charge of washing for heads, the charge of washing of this invention is also applicable to a shampoo etc. with said surfactant, pharmaceutical-preparation-izing it in it, and can also be pharmaceutical-preparation-ized as cleansing creams for both pre shampoos, such as a nonionic surface active agent. In this, especially a desirable thing is the cleansing cream for a pre shampoo. This is because the washing capacity of the surfactant which the shampoo contains can be heightened remarkably, when the component of the charge of washing of this invention removes sebum and oily dirt beforehand. In order to make it such cleansing cream dosage forms for a pre shampoo, it is desirable to contain both the good nonionic surface active agents of concordance with the

department alcohols of others and sebum dirt which are dipropylene glycol, an isoprene glycol, etc. which are the desirable component of the charge of washing of this invention. As such a nonionic surfactant, the fatty acid ester of polyglycerin can illustrate preferably, for example, the desirable average degree of polymerization of the polyglycerin in this case — 4-20 — 7-15 can be illustrated still more preferably. Moreover, as fatty-acid residue, lauric-acid residue can illustrate preferably especially. The desirable content of these nonionic surface active agents can illustrate 0.05 — 10 % of the weight still more preferably 0.01 to 20% of the weight. This is because the addition effectiveness may not be acquired if a feeling of use, such as attaching [ which was able to fly / which is ], may be spoiled and it is too few.

[0010] In the charge of washing of this invention, the arbitration component usually used by cosmetics can be contained in the range which does not spoil the effectiveness of this invention besides the above-mentioned component. As such an arbitration component, for example Hydrocarbons, such as squalane, vaseline, and a micro crystallin wax Ester, such as jojoba oil, carnauba wax, and oleic acid octyldodecyl Triglyceride, such as olive oil, beef tallow, and coconut oil, dimethicone, and FEMECHIKON, Fatty acids, such as silicone, such as AMOJIMECHIKON, stearin acid, oleic acid, and a RICHINO lane acid, Higher alcohol, such as oleyl alcohol, stearyl alcohol, and an octyl dodecanol, Anionic surface active agents, such as sulfo succinate and polyoxyethylene sodium alkylsulfate Cationic surface active agents, such as amphoteric surface active agents, such as an alkyl betaine salt, and dialkyl ammonium salt A sorbitan fatty acid ester, fatty acid monoglyceride, these polyoxyethylene addition products, Nonionic surface active agents, such as polyoxyethylene alkyl ether and polyoxyethylene fatty acid ester Polyhydric alcohol other than dipropylene glycols, such as a polyethylene glycol, a glycerol, and 1,3-butanediol, or an isoprene glycol Cool components, such as thickening and gelling agents, such as xanthan gum, Cyamoposis Gum, a carboxyvinyl polymer, cation-ized cellulose ether, and cation-ized Cyamoposis Gum, an antioxidant, an ultraviolet ray absorbent, perfume, color material, antiseptics, fine particles, and menthol, etc. can illustrate preferably. The charge of washing of this invention can be manufactured by processing these components according to a conventional method. Of course, it can also pharmaceutical-preparation-ize with the above-mentioned arbitration component in the charge of soma washing, or the charge of washing for washing its face, and since such a charge of washing can also remove the superfluous secretion sebum in the skin, it belongs to the technical range of this invention.

[0011]

[Example] Although an example is given to below and explanation is further added to a detail about this invention, it cannot be overemphasized that this invention does not receive limitation only in these examples.

[0012] According to the formula shown below in <the example 1>, the cleansing cream 1 for a pre shampoo which is the charge of washing of this invention was created. That is, the formula component was heated at 70 degrees C, was stirred, and was solubilized, stirring cooling was carried out, and the cleansing cream 1 for a pre shampoo was obtained. The example 3 of a comparison which permuted separately the example 1 of a comparison which permuted all the VANIRIRU butyl ether of this thing by water, the example 2 of a comparison which permuted L-menthol and capsicum tincture by water and VANIRIRU butyl ether, and L-menthol and capsicum tincture by water was also created. Examination which removes a lipid was performed from the scalp of the man of oily skin using these. That is, it washed away, after sprinkling 5ml of cleansing creams 1 of this invention and massaging the one half of the head well. The one half of the remaining head was similarly processed in the example 1 of a comparison, and the photograph after these processings was taken with the video microscope. The photograph of a part processed with cleansing cream 1 to drawing 1 is shown. The photograph after processing the photograph after processing the photograph of a part processed in the example 1 of a comparison to drawing 2 in the example 2 of a comparison to drawing 3 in the example 3 of a comparison to drawing 4 is shown. When these are compared, it turns out that the processing by cleansing cream 1 which is the charge of washing of this invention has removed lipid dirt intentionally. It also turns out that this is what is depended on the synergism of the compound expressed to the general formula (I) which is the indispensable component of this invention, and L-menthol which is the matter which has a teleangiectasia operation. Moreover, the desirable sense of heat was sensed for the charge of washing of this invention.

Dipropylene glycol 15 Weight section ethanol 15 Weight section carboxyvinyl polymer 10% caustic potash water solution of 0.5 weight sections 2 Weight section silicone emulsion 3 Weight section L-menthol 1 Weight section xanthan gum 0.1 weight section sodium lactate 0.1 weight section deca glycerol lauric-acid ester 10 Weight section capsicum tincture 1 Weight section VANIRIRU butyl ether 0.1 weight \*\*\*\* The 52.2 weight sections

[0013] How depending on which the sebum dirt the case where it pretreated and shampoos with the cleansing cream 1 of the above-mentioned example 1 using the shampoo of a formula shown in the <example 2> following,

and at the time of shampooing without pretreatment remains was observed. The one half of the head of the panelist of oily skin pretreated with cleansing cream 1, and without pretreating, the remaining one half shampooed its hair successively with the following shampoo, and observed with the video macro scope. A photograph is shown, although it shampooed after pretreating to drawing 5 and its hair was shampooed without pretreatment to drawing 6 in the photograph. This shows the cleansing cream lipid removal effectiveness for the pre shampoo of this invention.

(Shampoo formula)

Polyoxyethylene sodium lauryl sulfate 10 Weight section polyoxyethylene palm-oil-fatty-acid monoethanolamide 5 Weight section sodium lauryl sulfate 2 Weight section 1,3-butanediol 10 Weight \*\*\*\* 73 Weight section [0014] According to the formula shown below in <the example 3>, the cleansing cream 2 for a pre shampoo which is the charge of washing of this invention was created. That is, the formula component was heated at 70 degrees C, was stirred, and was solubilized, stirring cooling was carried out, and the cleansing cream 2 for a pre shampoo was obtained. The photograph after processing was taken with the video microscope like the example 1. This thing had the same lipid removal effectiveness as an example 1.

An isoprene glycol 15 Weight section ethanol 15 Weight section carboxyvinyl polymer 10% caustic potash water solution of 0.5 weight sections 2 Weight section silicone emulsion 3 Weight section L-menthol 1 Weight section xanthan gum 0.1 weight section sodium lactate 0.1 weight section deca glycerol lauric-acid ester 10 Weight section capsicum tincture 1 Weight section VANIRIRU butyl ether 1 Weight \*\*\*\* The 51.3 weight sections [0015] According to the formula shown below in <the example 3>, the cleansing cream 3 for a pre shampoo which is the charge of washing of this invention was created. That is, the formula component was heated at 70 degrees C, was stirred, and was solubilized, stirring cooling was carried out, and the cleansing cream 3 for a pre shampoo was obtained. The photograph after processing was taken with the video microscope like the example 1. This thing had the same lipid removal effectiveness as an example 1.

Sorbitol 15 Weight section ethanol 15 Weight section carboxyvinyl polymer 10% caustic potash water solution of 0.5 weight sections 2 Weight section silicone emulsion 3 Weight section L-menthol 1 Weight section xanthan gum A 0.1 weight section glycolic-acid potassium 0.1 weight section deca glycerol lauric-acid ester 10 Weight section capsicum tincture 1 Weight section VANIRIRU butyl ether 0.3 weight \*\*\*\* 52 Weight section [0016] According to the formula shown below in <the example 4>, the shampoo 1 which is the charge of washing of this invention was created. That is, the formula component was heated at 70 degrees C, was stirred, and was solubilized, stirring cooling was carried out, and the shampoo 1 was obtained. A photograph was taken with the photograph video microscope after the shampoo of this thing. Although this thing excelled the usual shampoo in the lipid removal operation, it was less than what was shampooed after carrying out pre shampoo processing. Moreover, the example 4 of a comparison which permuted sodium lactate by water is inferior to this thing in the lipid removal operation further, and the addition effectiveness of a hydroxy acid was confirmed.

An isoprene glycol 5 Weight section sodium lactate 0.5 weight section polyoxyethylene sodium lauryl sulfate 10 Weight section polyoxyethylene palm-oil-fatty-acid monoethanolamide 5 Weight section sodium lauryl sulfate 2 Weight section 1,3-butanediol 5 Weight section eucalyptus extractives 0.1 weight sections VANIRIRU butyl ether 0.1 weight \*\*\*\* 72.3 weight section [0017] The sodium lactate in the cleaning agent of this invention of the <example 5> example 1 was permuted by water, and the cleaning agent of this invention was created. the scalp excellent in this thing -- although excelled in the operation which removes the sebum of the section, it was less than the cleaning agent of an example 1.

[0018]

[Effect of the Invention] According to this invention, a sebum removal operation can be raised and maintenance of hair and depilatory prevention can be provided with a useful cleaning agent.

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[Translation done.]

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TECHNICAL FIELD

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[Field of the Invention] This invention relates to a detail further about a cleaning agent at the suitable cleaning agent for the cleaning agent for the hairs, such as a shampoo.

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PRIOR ART

[Description of the Prior Art] Eating habits of a man of today changed remarkably through the consumption-habits society of the postwar period and a bubble. the new illness which it is mentioned that Westernization was remarkable and the intake of a fat or animal albumin increased rapidly, and physiological function of a man of today also changes remarkably with change of these eating habits, and originates in such a situation if the change is summarized — or although it does not result in the illness, non-health condition is born. As an inconvenient event on such health, rapid increase of a circulatory system disease, increase of a cerebral function failure, and generating of various inconvenient events by which it is accompanied unusually [ lipid metabolism ] are mentioned. Among this, although rapid increase of a circulatory system disease and increase of a cerebral function failure have been the technical problem of a physic field, in the field of cosmetics, generating of the inconvenient event by which it is accompanied unusually [ lipid metabolism ] has been a big technical problem. Specifically as such a technical problem, problems by lipid metabolism rise, such as increase of messy makeup and inhibition of hair growth, are mentioned. A depilatory problem is a serious problem in a male, and will especially be not mentioning the explosive hit of minoxidil pharmaceutical preparation as an example. Development of the technique of removing an excess or the metabolic turnover lipid which deteriorated from a hair circumference organization against the background of such a situation was desired. Furthermore, in such a part, the blood flow of a peripheral vessel is checked and it is considered to be a desirable thing to extend a peripheral vessel from the standpoint of care and cleaning of the hair of hair, since it is said that it is the factor in which the defect of such circulation also promotes depilation, and to improve a deletion blood flow. However, when a lipid and dirt were removed from the skin, it was not known at all that coexistence will help [ the matter which increases such a blood stream ] removal of a lipid. Moreover, it was not known at all that VANIRIRU alkyl ether, such as VANIRIRU butyl ether, will reinforce such an operation of the matter which extends a peripheral vessel; either.

[0003] Although removal by oily creams, such as washing with anionic surface active agents, such as usual soap and alkyl sulfate, and cleansing cream, the adsorption treatment by the adhesive sheet, etc. are the techniques already known as a means to, remove the lipid metabolized from the body on the other hand A component which dissolves specifically and removes sebum was not known, the usual cleaning agent was made to contain such sebum dissolution nature, and the cleaning agent which raised the sebum removal operation further was not known at all. this invention person has found out that dosage-forms-izing of such a cleaning agent is possible with the combination of dipropylene glycol and an isoprene glycol. Moreover, by combining with such a component and the component which improves a peripheral blood style, raising such a dissolution / removal operation and getting is not performed, and it could not hit on an idea. In addition, reinforcing such work of the component to which this peripheral vessel is made to extend was not known at all, either.

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EFFECT OF THE INVENTION

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[Effect of the Invention] According to this invention, a sebum removal operation can be raised and maintenance of hair and depilatory prevention can be provided with a useful cleaning agent.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] This invention is carried out the sake such under a situation, and a sebum removal operation is raised and let it be a technical problem to provide healthy hair, maintenance of the skin, and depilatory prevention with a useful cleaning agent.

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MEANS

[Means for Solving the Problem] That a sebum removal operation should be raised in view of such a situation, and maintenance of hair and depilatory prevention should be provided with a useful cleaning agent, this invention persons found out such a property to dipropylene glycol or isoprene glycols, as a result of stepping up research efforts wholeheartedly. As a result of adding the further examination, by combining the component which increases VANIRIRU alkyl ether and a peripheral blood style in an operation of this thing, it finds out that it can raise and came to complete invention. That is, this invention relates to the technique shown below.

- (1) The cleaning agent characterized by containing one sort chosen from 1 VANIRIRU butyl ether and the matter which has 2 teleangiectasia operation, or two sorts or more.
- (2) A cleaning agent given in (1) to which the matter which has a teleangiectasia operation is characterized by being a terpene, steroids, and those glycosides.
- (3) A cleaning agent given in (1) a terpene and whose a steroid are menthol, Timor, ursolic acid, oleanolic acid, ecdysone, a PORIPORU sterone, estradiol, and estriol, or (2).
- (4) A cleaning agent given in (1) – (3) any 1 term furthermore characterized by containing a hydroxy acid and/or its salt.
- (5) A cleaning agent given in (4) characterized by a hydroxy acid being an alpha-hydroxy acid.
- (6) A cleaning agent given in (5) characterized by alpha-hydroxy acid being a lactic acid.
- (7) A cleaning agent given in (1) – (6) any 1 term characterized by a cleaning agent being for the hairs.
- (8) A cleaning agent given in (1) – (7) any 1 term characterized by having a removal operation of the sebum of pore.
- (9) the scalp -- the charge of washing given in (1) – (8) any 1 term characterized by being a charge of cleansing cream.

[0006]

[Embodiment of the Invention] (1) The cosmetics of VANIRIRU alkyl ether this invention which is the indispensable component of the cleaning agent of this invention are characterized by containing VANIRIRU alkyl ether. VANIRIRU alkyl ether, such as VANIRIRU butyl ether, is already used as a perfume component in the field of cosmetics. Methyl ether, ethyl ether, propyl ether, isopropyl ether, normal butyl ether, isobutyl ether, secondary butyl ether, and tertiary butyl ether, the pentyl ether, the cyclopentyl ether, the hexyl ether, the cyclohexyl ether, cyclopentyl methyl ether, the octyl ether, the iso octyl ether, etc. can specifically [ as an alkyl group of the VANIRIRU alkyl ether in this invention what has the straight chain of carbon numbers 1–8 branching, or cyclic structure is desirable, and ] illustrate preferably. Although these ether can obtain the alkyl halide guided from VANIRIRU alcohol, corresponding alcohol, and a halogenating agent like a thionyl chloride by condensing under alkali existence, many things are marketed and it can also use this. Furthermore, although these VANIRIRU alkyl ether generates a base and a salt, such a salt also belongs to the range of the VANIRIRU ether of this invention. Alkaline–earth–metal salts, such as an alkali–metal salt like sodium or a potassium as this base, calcium, and magnesium, ammonium salt, an organic amine salt, a basic–amino–acid salt, etc. can be illustrated. Especially desirable things are VANIRIRU normal butyl ether (VANIRIRU butyl ether may only be called hereafter) and/or its salt in such VANIRIRU alkyl ether. Especially this is because the sebum dissolution auxiliary operation of this thing is excellent. Moreover, such a perfume component has the sense–of–heat grant operation, and is used also as a sense–of–heat grant agent. However, the operation as an enhancement agent of a sebum removal operation is not known, and even if used for such the purpose, it is not required. It is that use in the cosmetics of this thing has already been performed, and although that acquisition is marketed therefore, it is preparation, and it can use such a commercial item in the cleaning agent of this invention. In the cleaning

agent of this invention, although this VANIRIRU alkyl ether acts as an enhancement agent of a sebum solvent action, it demonstrates a sense-of-heat grant operation in such a use process. Therefore, the technique of making the washing existence for sebum removal containing a sense-of-heat unnecessary operation for the purpose also belongs to the technical range of this invention. In the cleaning agent of this invention, even if VANIRIRU alkyl ether combines two or more sorts also by the species uniquely, it can have and it can be, and the desirable content of the VANIRIRU alkyl ether in the cleaning agent of this invention is 0.005 – 5 % of the weight in a total amount to the charge whole quantity of washing, and is 0.01 – 1 % of the weight still more preferably. If too few, sebum removal potentiation may not be obtained, if there is too much this, it will give the superfluous sense of heat, and it is because it may not be desirable in feel.

[0007] (2) The cleaning agent of matter this invention which has a teleangiectasia operation which is the indispensable component of the cleaning agent of this invention is characterized by containing the matter which has a teleangiectasia operation as an indispensable component. It is easy to be extent from which the increment in about 5% of blood stream is observed by the screening using the detailed blood vessel on the membrane in the oral cavity of a hamster unlike the teleangiectasia agent which usually defines the matter to which the peripheral vessel as used in the field of this invention is made to extend here by the medicinal field. As such a component, for example Menthol (11% of increment), Timor (increment in 8%), Terpenes, such as ursolic acid sodium (7%) and oleanolic acid sodium (increment in 6%), Estradiol (increment in 7%), a PORIPORU sterone (increment in 11%), Steroids, such as ecdysterone (increment in 6%), capsaicin (increment in 12%), The glycoside of steroids, such as a glycoside of terpenes, such as the glycerol mono-menthyl ether (increment in 8%), a menthol glucoside (increment in 6%), and an ursolic acid glucoside (increment in 5%), and an ecdysterone glucoside (increment in 5%), etc. can illustrate preferably. Moreover, it belongs to the matter which has the teleangiectasia operation as used in the field of [ the crude drug extractives which contain these components in high concentration, for example, mint extractives, juniper berry extractives, eucalyptus extractives, capsici fructus extractives, rosemary extractives, etc. ] this invention. These components can also make only a seed able to contain uniquely and can also be made to contain in the charge of washing of this invention combining two or more sorts. The content with this desirable component in the cleaning agent of this invention is 0.01 – 10 % of the weight in a total amount to the cosmetics whole quantity, and is 0.05 – 5 % of the weight still more preferably.

[0008] (3) As for the charge of washing of the hydroxy acid preferably contained in the charge of washing of this invention, and/or its salt this invention, it is desirable to contain a hydroxy acid and/or its salt. This is because it has the operation sebum dirt makes it easy for such a component to soften the skin and to break away from the skin. As this hydroxy acid, beta-hydroxy acids, such as alpha-hydroxy acids, such as a lactic acid, and a glycolic acid, a malic acid, and beta-lactic acid, etc. can be illustrated, among these, alpha-hydroxy acid is more desirable and a lactic acid and a glycolic acid can illustrate preferably especially. Moreover, if it is the salt usually used by cosmetics as a salt of these hydroxy acids, it can be used, without receiving special limitation, for example, basic-amino-acid salts, such as organic amine salts, such as alkaline earth metal salts, such as alkali-metal salts, such as sodium and a potassium, calcium, and magnesium, ammonium salt, a triethanolamine salt, a diethanolamine salt, and a triethylamine salt, a lysine salt, and an arginine salt, etc. can illustrate preferably. In the charge of washing of this invention, these hydroxy acids and/or the salt of those can also contain a seed uniquely, and can also contain it combining two or more sorts. The desirable content in the charge of washing of this invention of these hydroxy acids and/or the salt of those is 0.01 – 10 % of the weight in a total amount to the charge whole quantity of washing, and is 0.05 – 2 % of the weight still more preferably.

[0009] (4) The charge of washing of charge this invention of washing of this invention is characterized by containing the VANIRIRU alkyl ether represented by the above-mentioned VANIRIRU butyl ether and the matter which has the operation which extends a peripheral vessel, and containing a hydroxy acid and/or its salt preferably as a component of arbitration. Here, the charge of washing said by this invention means the cosmetics used in order for remaining on a living body to remove components, such as sebum secreted superfluously, a horny layer which became old which is not desirable, dirt, those complex, etc., for example, charges of \*\*\* washing, such as charges of soma washing, such as charges of head washing, such as a shampoo and a rinse, soap, and a body shampoo, a charge of washing their face, and washing-their-face soap, etc. can be illustrated. Since it excels in the operation whose combination of the indispensable component of this invention reinforces a removal operation of the scalp or the sebum in the head pore circumference especially as a charge of washing of this invention among this, especially the thing to use as such a charge of washing for heads is desirable. Of course, it is desirable to make the dipropylene glycol which sets in such a case and has such a sebum solvent action, an isoprene glycol, etc. contain, and 5 – 20 % of the weight can be

illustrated still more preferably one to 30% of the weight in a total amount to the charge whole quantity of washing as a content with such a desirable component. The charge of washing of this invention has the operation on which the sebum which exists in said scalp or near pore is dropped. [ from which it is hard to drop only surfactants, such as anionic surfactants, such as the conventional shampoo, and a nonionic surfactant, to what is made into the active principle of the charge of washing as the operation ] When using as a charge of washing for heads, the charge of washing of this invention is also applicable to a shampoo etc. with said surfactant, pharmaceutical-preparation-izing it in it, and can also be pharmaceutical-preparation-ized as cleansing creams for both pre shampoos, such as a nonionic surface active agent. In this, especially a desirable thing is the cleansing cream for a pre shampoo. This is because the washing capacity of the surfactant which the shampoo contains can be heightened remarkably, when the component of the charge of washing of this invention removes sebum and oily dirt beforehand. In order to make it such cleansing cream dosage forms for a pre shampoo, it is desirable to contain both the good nonionic surface active agents of concordance with the department alcohols of others and sebum dirt which are dipropylene glycol, an isoprene glycol, etc. which are the desirable component of the charge of washing of this invention. As such a nonionic surfactant, the fatty acid ester of polyglycerin can illustrate preferably, for example. the desirable average degree of polymerization of the polyglycerin in this case — 4-20 — 7-15 can be illustrated still more preferably. Moreover, as fatty-acid residue, lauric-acid residue can illustrate preferably especially. The desirable content of these nonionic surface active agents can illustrate 0.05 — 10 % of the weight still more preferably 0.01 to 20% of the weight. This is because the addition effectiveness may not be acquired if a feeling of use, such as attaching [ which was able to fly / which is ], may be spoiled and it is too few.

[0010] In the charge of washing of this invention, the arbitration component usually used by cosmetics can be contained in the range which does not spoil the effectiveness of this invention besides the above-mentioned component. As such an arbitration component, for example Hydrocarbons, such as squalane, vaseline, and a micro crystallin wax Ester, such as jojoba oil, carnauba wax, and oleic acid octyldodecyl Triglyceride, such as olive oil, beef tallow, and coconut oil, dimethicone, and FEMECHIKON, Fatty acids, such as silicone, such as AMOJIMECHIKON, stearin acid, oleic acid, and a RICHINO lane acid, Higher alcohol, such as oleyl alcohol, stearyl alcohol, and an octyl dodecanol, Anionic surface active agents, such as sulfo succinate and polyoxyethylene sodium alkylsulfate Cationic surface active agents, such as amphoteric surface active agents, such as an alkyl betaine salt, and dialkyl ammonium salt A sorbitan fatty acid ester, fatty acid monoglyceride, these polyoxyethylene addition products, Nonionic surface active agents, such as polyoxyethylene alkyl ether and polyoxyethylene fatty acid ester Polyhydric alcohol other than dipropylene glycols, such as a polyethylene glycol, a glycerol, and 1,3-butanediol, or an isoprene glycol Cool components, such as thickening and gelling agents, such as xanthan gum, Cyamoposis Gum, a carboxyvinyl polymer, cation-ized cellulose ether, and cation-ized Cyamoposis Gum, an antioxidant, an ultraviolet ray absorbent, perfume, color material, antiseptics, fine particles, and menthol, etc. can illustrate preferably. The charge of washing of this invention can be manufactured by processing these components according to a conventional method. Of course, it can also pharmaceutical-preparation-ize with the above-mentioned arbitration component in the charge of soma washing, or the charge of washing for washing its face, and since such a charge of washing can also remove the superfluous secretion sebum in the skin, it belongs to the technical range of this invention.

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[Translation done.]

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EXAMPLE

[Example] Although an example is given to below and explanation is further added to a detail about this invention, it cannot be overemphasized that this invention does not receive limitation only in these examples. [0012] According to the formula shown below in <the example 1>, the cleansing cream 1 for a pre shampoo which is the charge of washing of this invention was created. That is, the formula component was heated at 70 degrees C, was stirred, and was solubilized, stirring cooling was carried out, and the cleansing cream 1 for a pre shampoo was obtained. The example 3 of a comparison which permuted separately the example 1 of a comparison which permuted all the VANIRIRU butyl ether of this thing by water, the example 2 of a comparison which permuted L-menthol and capsicum tincture by water and VANIRIRU butyl ether, and L-menthol and capsicum tincture by water was also created. Examination which removes a lipid was performed from the scalp of the man of oily skin using these. That is, it washed away, after sprinkling 5ml of cleansing creams 1 of this invention and massaging the one half of the head well. The one half of the remaining head was similarly processed in the example 1 of a comparison, and the photograph after these processings was taken with the video microscope. The photograph of a part processed with cleansing cream 1 to drawing 1 is shown. The photograph after processing the photograph after processing the photograph of a part processed in the example 1 of a comparison to drawing 2 in the example 2 of a comparison to drawing 3 in the example 3 of a comparison to drawing 4 is shown. When these are compared, it turns out that the processing by cleansing cream 1 which is the charge of washing of this invention has removed lipid dirt intentionally. It also turns out that this is what is depended on the synergism of the compound expressed to the general formula (I) which is the indispensable component of this invention, and L-menthol which is the matter which has a teleangiectasia operation. Moreover, the desirable sense of heat was sensed for the charge of washing of this invention.

Dipropylene glycol 15 Weight section ethanol 15 Weight section carboxyvinyl polymer 10% caustic potash water solution of 0.5 weight sections 2 Weight section silicone emulsion 3 Weight section L-menthol 1 Weight section xanthan gum 0.1 weight section sodium lactate 0.1 weight section deca glycerol lauric-acid ester 10 Weight section capsicum tincture 1 Weight section VANIRIRU butyl ether 0.1 weight \*\*\*\* The 52.2 weight sections

[0013] How depending on which the sebum dirt the case where it pretreated and shampoos with the cleansing cream 1 of the above-mentioned example 1 using the shampoo of a formula shown in the <example 2> following, and at the time of shampooing without pretreatment remains was observed. The one half of the head of the panelist of oily skin pretreated with cleansing cream 1, and without pretreating, the remaining one half shampooed its hair successively with the following shampoo, and observed with the video macro scope. A photograph is shown, although it shampooed after pretreating to drawing 5 and its hair was shampooed without pretreatment to drawing 6 in the photograph. This shows the cleansing cream lipid removal effectiveness for the pre shampoo of this invention.

(Shampoo formula)

Polyoxyethylene sodium lauryl sulfate 10 Weight section polyoxyethylene palm-oil-fatty-acid monoethanolamide 5 Weight section sodium lauryl sulfate 2 Weight section 1,3-butanediol 10 Weight \*\*\*\* 73 Weight section [0014] According to the formula shown below in <the example 3>, the cleansing cream 2 for a pre shampoo which is the charge of washing of this invention was created. That is, the formula component was heated at 70 degrees C, was stirred, and was solubilized, stirring cooling was carried out, and the cleansing cream 2 for a pre shampoo was obtained. The photograph after processing was taken with the video microscope like the example 1. This thing had the same lipid removal effectiveness as an example 1.

An isoprene glycol 15 Weight section ethanol 15 Weight section carboxyvinyl polymer 10% caustic potash water solution of 0.5 weight sections 2 Weight section silicone emulsion 3 Weight section L-menthol 1 Weight section

xanthan gum 0.1 weight section sodium lactate 0.1 weight section deca glycerol lauric-acid ester 10 Weight section capsicum tincture 1 Weight section VANIRIRU butyl ether 1 Weight \*\*\*\* The 51.3 weight sections [0015] According to the formula shown below in <the example 3>, the cleansing cream 3 for a pre shampoo which is the charge of washing of this invention was created. That is, the formula component was heated at 70 degrees C, was stirred, and was solubilized, stirring cooling was carried out, and the cleansing cream 3 for a pre shampoo was obtained. The photograph after processing was taken with the video microscope like the example 1. This thing had the same lipid removal effectiveness as an example 1.

Sorbitol 15 Weight section ethanol 15 Weight section carboxyvinyl polymer 10% caustic potash water solution of 0.5 weight sections 2 Weight section silicone emulsion 3 Weight section L-menthol 1 Weight section xanthan gum A 0.1 weight section glycolic-acid potassium 0.1 weight section deca glycerol lauric-acid ester 10 Weight section capsicum tincture 1 Weight section VANIRIRU butyl ether 0.3 weight \*\*\*\* 52 Weight section [0016] According to the formula shown below in <the example 4>, the shampoo 1 which is the charge of washing of this invention was created. That is, the formula component was heated at 70 degrees C, was stirred, and was solubilized, stirring cooling was carried out, and the shampoo 1 was obtained. A photograph was taken with the photograph video microscope after the shampoo of this thing. Although this thing excelled the usual shampoo in the lipid removal operation, it was less than what was shampooed after carrying out pre shampoo processing. Moreover, the example 4 of a comparison which permuted sodium lactate by water is inferior to this thing in the lipid removal operation further, and the addition effectiveness of a hydroxy acid was confirmed.

An isoprene glycol 5 Weight section sodium lactate 0.5 weight section polyoxyethylene sodium lauryl sulfate 10 Weight section polyoxyethylene palm-oil-fatty-acid monoethanolamide 5 Weight section sodium lauryl sulfate 2 Weight section 1,3-butanediol 5 Weight section eucalyptus extractives 0.1 weight sections VANIRIRU butyl ether 0.1 weight \*\*\*\* 72.3 weight section [0017] The sodium lactate in the cleaning agent of this invention of the <example 5> example 1 was permuted by water, and the cleaning agent of this invention was created. the scalp excellent in this thing -- although excelled in the operation which removes the sebum of the section, it was less than the cleaning agent of an example 1.

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DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]

[Drawing 1] It is drawing showing the result processed with the cleansing cream 1 of an example 1. (Drawing substitution photograph)

[Drawing 2] It is drawing showing the result processed in the example 1 of a comparison of an example 1. (Drawing substitution photograph)

[Drawing 3] It is drawing showing the result processed in the example 2 of a comparison of an example 1. (Drawing substitution photograph)

[Drawing 4] It is drawing showing the result processed in the example 3 of a comparison of an example 1. (Drawing substitution photograph)

[Drawing 5] Example 2, after pretreating, it is drawing showing a shampoo result. (Drawing substitution photograph)

[Drawing 6] It is drawing showing a shampoo result without example 2 pretreatment. (Drawing substitution photograph)

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**DRAWINGS**

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[Drawing 1]



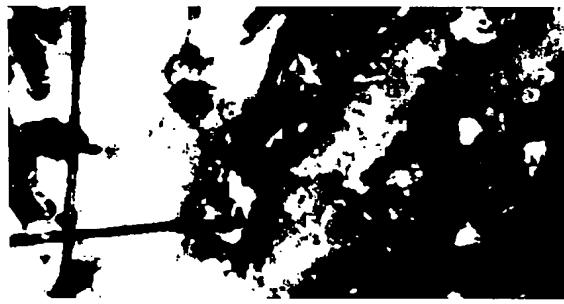
[Drawing 2]



[Drawing 3]



[Drawing 4]



[Drawing 5]



[Drawing 6]



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CORRECTION OR AMENDMENT

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[Kind of official gazette] Printing of amendment by the convention of 2 of Article 17 of Patent Law

[Section partition] The 2nd partition of the 3rd section

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[Filing Date] August 22, Heisei 18 (2006. 8.22)

[Procedure amendment 1]

[Document to be Amended] Specification

[Item(s) to be Amended] Claim

[Method of Amendment] Modification

[The contents of amendment]

[Claim(s)]

[Claim 1] 1) The scalp or the charge of washing for the hairs characterized by containing the matter which has one sort or two sorts or more of teleangiectasia operations chosen from VANIRIRU alkyl ether, and two terpenes, steroids and those glycosides, or the crude drug extractives containing it.

[Claim 2] The scalp according to claim 1 or the charge of washing for the hairs whose terpene is menthol, the glycerol mono-menthyl ether, Timor, ursolic acid, or oleanolic acid and whose steroid is ecdysterone, estradiol, or estriol.

[Claim 3] The scalp according to claim 1 or the charge of washing for the hairs whose crude drug extractives containing one sort chosen from a terpene, steroids, and those glycosides or two sorts or more are mint extractives, juniper berry extractives, eucalyptus extractives, capsici fructus extractives, and rosemary extractives.

[Claim 4] furthermore, claims 1-3 characterized by containing alpha-hydroxy acid and/or its salt -- the scalp given in any or the 1st term, or the charge of washing for the hairs.

[Claim 5] The scalp according to claim 4 or the charge of washing for the hairs characterized by alpha-hydroxy

acid being a lactic acid.

[Claim 6] the scalp -- claims 1-5 characterized by being a charge of cleansing cream -- the scalp given in any or the 1st term, or the charge of washing for the hairs.

[Claim 7] Furthermore, the scalp according to claim 6 or the charge of washing for the hairs characterized by containing dipropylene glycol and/or an isoprene glycol.

[Procedure amendment 2]

[Document to be Amended] Specification

[Item(s) to be Amended] 0001

[Method of Amendment] Modification

[The contents of amendment]

[0001]

[Field of the Invention]

This invention relates to the charge of washing for the scalp or the hairs.

[Procedure amendment 3]

[Document to be Amended] Specification

[Item(s) to be Amended] 0002

[Method of Amendment] Modification

[The contents of amendment]

[0002]

[Description of the Prior Art]

Eating habits of a man of today changed remarkably through the consumption-habits society of the postwar period and a bubble. the new illness which it is mentioned that Westernization was remarkable and the intake of a fat or animal albumin increased rapidly, and physiological function of a man of today also changes remarkably with change of these eating habits, and originates in such a situation if the change is summarized -- or although it does not result in the illness, non-health condition is born. As an inconvenient event on such health, rapid increase of a circulatory system disease, increase of a cerebral function failure, and generating of various inconvenient events by which it is accompanied unusually [ lipid metabolism ] are mentioned. Among this, although rapid increase of a circulatory system disease and increase of a cerebral function failure have been the technical problem of a physic field, in the field of cosmetics, generating of the inconvenient event by which it is accompanied unusually [ lipid metabolism ] has been a big technical problem. Specifically as such a technical problem, problems by lipid metabolism rise, such as increase of messy makeup and inhibition of hair growth, are mentioned. A depilatory problem is a serious problem in a male, and will especially be not mentioning the explosive hit of minoxidil pharmaceutical preparation as an example. Development of the technique of removing an excess or the metabolic turnover lipid which deteriorated from a hair circumference organization against the background of such a situation was desired. Furthermore, in such a part, the blood flow of a peripheral vessel is checked and it is considered to be a desirable thing to extend a peripheral vessel from the standpoint of care and cleaning of the hair of hair, since it is said that it is the factor in which the defect of such circulation also promotes depilation, and to improve a peripheral blood style. However, when a lipid and dirt were removed from the skin, it was not known at all that the coexistence of the matter which increases such a blood stream will help removal of a lipid. Moreover, it was not known at all that VANIRIRU alkyl ether, such as VANIRIRU butyl ether, will reinforce such an operation of the matter which extends a peripheral vessel, either.

[Procedure amendment 4]

[Document to be Amended] Specification

[Item(s) to be Amended] 0003

[Method of Amendment] Modification

[The contents of amendment]

[0003]

Although removal by oily creams, such as washing with anionic surface active agents, such as usual soap and alkyl sulfate, and cleansing cream, the adsorption treatment by the adhesive sheet, etc. are the techniques already known as a means to, remove the lipid metabolized from the body on the other hand A component which dissolves specifically and removes sebum was not known, the usual charge of washing was made to contain such a sebum dissolution component, and the charge of washing which raised the sebum removal operation further was not known at all. this invention person has found out that dosage-forms-izing of such a charge of washing is

possible by dipropylene glycol, an isoprene glycol, etc. Moreover, by combining with such a component and the component which improves a peripheral blood style, raising such a dissolution / removal operation and getting is not performed, and it could not hit on an idea. In addition, it was not known at all that the component to which this peripheral vessel is made to extend will reinforce such work, either.

[Procedure amendment 5]

[Document to be Amended] Specification

[Item(s) to be Amended] 0004

[Method of Amendment] Modification

[The contents of amendment]

[0004]

[Problem(s) to be Solved by the Invention]

This invention is carried out the sake such under a situation, and a sebum removal operation is raised and let it be a technical problem to provide healthy hair, maintenance of the skin, and depilatory prevention with the useful charge of washing.

[Procedure amendment 6]

[Document to be Amended] Specification

[Item(s) to be Amended] 0005

[Method of Amendment] Modification

[The contents of amendment]

[0005]

[Means for Solving the Problem]

That a sebum removal operation should be raised in view of such a situation, and maintenance of hair and depilatory prevention should be provided with the useful charge of washing, this invention persons found out such a property to dipropylene glycol or isoprene glycols, as a result of stepping up research efforts wholeheartedly. As a result of adding the further examination, by combining the matter which has VANIRIRU alkyl ether and a teleangiectasia operation for an operation of this thing, it finds out that it can raise and came to complete invention. That is, this invention relates to the technique shown below.

(1) The scalp or the charge of washing for the hairs characterized by containing the matter which has one sort or two sorts or more of teleangiectasia operations chosen from 1 VANIRIRU alkyl ether, and two terpenes, steroids and those glycosides, or the crude drug extractives containing it.

(2) The scalp given in (1) whose a terpene is menthol, the glycerol mono-menthyl ether, Timor, ursolic acid, or oleanolic acid and whose a steroid is ecdysterone, estradiol, or estriol, or the charge of washing for the hairs.

(3) The scalp given in (1) whose crude drug extractives containing one sort chosen from a terpene, steroids, and those glycosides or two sorts or more are mint extractives, juniper berry extractives, eucalyptus extractives, capsici fructus extractives, and rosemary extractives, or the charge of washing for the hairs.

(4) (1) – (3) furthermore characterized by containing alpha-hydroxy acid and/or its salt -- the scalp given in any they are, or the charge of washing for the hairs.

(5) The scalp given in (4) characterized by alpha-hydroxy acid being a lactic acid, or the charge of washing for the hairs.

(6) the scalp -- (1) – (5) characterized by being a charge of cleansing cream -- the scalp given in any they are, or the charge of washing for the hairs.

(7) The scalp given in (6) furthermore characterized by containing dipropylene glycol and/or an isoprene glycol, or the charge of washing for the hairs.

Hereafter, explanation is further added to a detail focusing on the gestalt of operation about this invention. In addition, the scalp of this invention or the charge of washing for the hairs is only called the charge of washing below.

[Procedure amendment 7]

[Document to be Amended] Specification

[Item(s) to be Amended] 0006

[Method of Amendment] Modification

[The contents of amendment]

[0006]

[Embodiment of the Invention]

(1) VANIRIRU alkyl ether which is the indispensable component of the charge of washing of this invention

The charge of washing of this invention is characterized by containing VANIRIRU alkyl ether. VANIRIRU alkyl ether, such as VANIRIRU butyl ether, is already used as a perfume component in the field of cosmetics. Methyl ether, ethyl ether, propyl ether, isopropyl ether, normal butyl ether, isobutyl ether, secondary butyl ether, and tertiary butyl ether, the pentyl ether, the cyclopentyl ether, the hexyl ether, the cyclohexyl ether, cyclopentyl methyl ether, the octyl ether, the iso octyl ether, etc. can specifically [ as an alkyl group of the VANIRIRU alkyl ether in this invention what has the straight chain of carbon numbers 1-8 branching, or cyclic structure is desirable, and ] illustrate preferably. These ether was guided from VANIRIRU alcohol, corresponding alcohol, and a halogenating agent like a thionyl chloride.

Although alkyl halide can be obtained by condensing under alkali existence, many things are marketed and this can also be used. Furthermore, although these VANIRIRU alkyl ether generates a base and a salt, such a salt also belongs to the range of the VANIRIRU ether of this invention. Alkaline-earth-metal salts, such as an alkali-metal salt like sodium or a potassium as this base, calcium, and magnesium, ammonium salt, an organic amine salt, a basic-amino-acid salt, etc. can be illustrated. Especially desirable things are VANIRIRU normal butyl ether (VANIRIRU butyl ether may only be called hereafter) and/or its salt in such VANIRIRU alkyl ether. Especially this is because the sebum dissolution auxiliary operation of this thing is excellent. Moreover, such a perfume component has the sense-of-heat grant operation, and is used also as a sense-of-heat grant agent. However, the operation as an enhancement agent of a sebum removal operation is not known, and even if used for such the purpose, it is not required. It is that use in the cosmetics of this thing has already been performed, and although that acquisition is marketed therefore, it is easy, and it can use such a commercial item in the charge of washing of this invention. In the charge of washing of this invention, although this VANIRIRU alkyl ether acts as an enhancement agent of a sebum solvent action, it demonstrates a sense-of-heat grant operation in such a use process. Therefore, the technique of making a sense-of-heat grant operation containing for the purpose in the charge of washing for sebum removal also belongs to the technical range of this invention. In the charge of washing of this invention, even if VANIRIRU alkyl ether combines two or more sorts also by the species uniquely, it can be used, and the desirable content of the VANIRIRU alkyl ether in the charge of washing of this invention is 0.005 – 5 % of the weight in a total amount to the charge whole quantity of washing, and is 0.01 – 1 % of the weight still more preferably. If too few, sebum removal potentiation may not be obtained, if there is too much this, it will give the superfluous sense of heat, and it is because it may not be desirable in feel.

[Procedure amendment 8]

[Document to be Amended] Specification

[Item(s) to be Amended] 0007

[Method of Amendment] Modification

[The contents of amendment]

[0007]

(2) Matter which has the teleangiectasia operation which is the indispensable component of the charge of washing of this invention

The charge of washing of this invention is characterized by containing the matter which has a teleangiectasia operation as an indispensable component. It is easy to be extent from which the increment in about 5% of blood stream is observed by the screening using the detailed blood vessel on the membrane in the oral cavity of a hamster unlike the teleangiectasia agent which usually defines the matter to which the peripheral vessel as used in the field of this invention is made to extend here by the medicinal field. As such a component, for example Menthol (11% of increment), Timor (increment in 8%), Terpenes, such as ursolic acid sodium (increment in 7%), and oleanolic acid sodium (increment in 6%), Steroids, such as estradiol (increment in 7%), and ecdysterone (increment in 6%), The glycoside of steroids, such as a glycoside of terpenes, such as capsaicin (increment in 12%), the glycerol mono-menthyl ether (increment in 8%), a menthol glucoside (increment in 6%), and an ursolic acid glucoside (increment in 5%), and an ecdysterone glucoside (increment in 5%), etc. is mentioned. Moreover, it belongs to the matter which has the teleangiectasia operation as used in the field of [ the crude drug extractives which contain these components in high concentration, for example, mint extractives, juniper berry extractives, eucalyptus extractives, capsici fructus extractives, rosemary extractives etc. ] this invention. These components can also make only a seed able to contain uniquely and can also be made to contain in the charge of washing of this invention combining two or more sorts. The content with this desirable component in the charge of washing of this invention is 0.01 – 10 % of the weight in a total amount to the charge whole quantity of washing, and is 0.05 – 5 % of the weight still more preferably.

[Procedure amendment 9]

[Document to be Amended] Specification

[Item(s) to be Amended] 0008

[Method of Amendment] Modification

[The contents of amendment]

[0008]

(3) alpha-hydroxy acid preferably contained in the charge of washing of this invention, and/or its salt

As for the charge of washing of this invention, it is desirable to contain alpha-hydroxy acid and/or its salt. This is because it has the operation sebum dirt makes it easy for such a component to soften the skin and to break away from the skin. As this alpha-hydroxy acid, a lactic acid, a glycolic acid, a malic acid, etc. can be illustrated, and a lactic acid and a glycolic acid can illustrate preferably especially among these. Moreover, if it is the salt usually used at the charge of washing as a salt of these alpha-hydroxy acid, it can be used, without receiving special limitation, for example, basic-amino-acid salts, such as organic amine salts, such as alkaline earth metal salts, such as alkali-metal salts, such as sodium and a potassium, calcium, and magnesium, ammonium salt, a triethanolamine salt, a diethanolamine salt, and a triethylamine salt, a lysine salt, and an arginine salt, etc. can illustrate preferably. In the charge of washing of this invention, these alpha-hydroxy acid and/or its salt can also contain a seed uniquely, and can also contain it combining two or more sorts. The desirable content in the charge of washing of this invention of these alpha-hydroxy acid and/or its salt is 0.01 – 10 % of the weight in a total amount to the charge whole quantity of washing, and is 0.05 – 2 % of the weight still more preferably.

[Procedure amendment 10]

[Document to be Amended] Specification

[Item(s) to be Amended] 0009

[Method of Amendment] Modification

[The contents of amendment]

[0009]

(4) The charge of washing of this invention

The charge of washing of this invention is characterized by containing the VANIRIRU alkyl ether represented by the above-mentioned VANIRIRU butyl ether and the matter which has the operation which extends a peripheral vessel, and containing alpha-hydroxy acid and/or its salt preferably as a component of arbitration. Here, the charge of washing said by this invention means the charge of washing used in order for remaining on a living body to remove components, such as sebum secreted superfluously, a horny layer which became old which is not desirable, dirt, those complex, etc., for example, a shampoo, a rinse, etc. can be illustrated. Of course, it is desirable to make the dipropylene glycol which sets in such a case and has a sebum solvent action, an isoprene glycol, etc. contain, and 5 – 20 % of the weight can be illustrated still more preferably one to 30% of the weight in a total amount to the charge whole quantity of washing as a content with such a desirable component. The charge of washing of this invention has the operation on which the sebum which exists in said scalp or near pore is dropped. [ from which it is hard to drop only surfactants, such as anionic surfactants, such as the conventional shampoo, and a nonionic surfactant, to what is made into the active principle of the charge of washing as the operation ] The charge of washing of this invention is also applicable to a shampoo etc. with said surfactant, pharmaceutical-preparation-izing it in it, and can also be pharmaceutical-preparation-ized as cleansing cream for a pre shampoo with a nonionic surface active agent etc. In this, especially a desirable thing is the cleansing cream for a pre shampoo. This is because the washing capacity of the surfactant which the shampoo contains can be heightened remarkably, when the component of the charge of washing of this invention removes sebum and oily dirt beforehand. In order to make it such cleansing cream dosage forms for a pre shampoo, it is desirable to contain both the good nonionic surface active agents of concordance with the polyhydric alcohol which are the desirable components of the charge of washing of this invention, such as dipropylene glycol and an isoprene glycol, and sebum dirt. As such a nonionic surfactant, the fatty acid ester of polyglycerin can illustrate preferably, for example, the desirable average degree of polymerization of the polyglycerin in this case -- 4-20 -- 7-15 can be illustrated still more preferably. Moreover, as fatty-acid residue, lauric-acid residue can illustrate preferably especially. The desirable content of these nonionic surface active agents can illustrate 0.05 – 10 % of the weight still more preferably 0.01 to 20% of the weight. This is because the addition effectiveness may not be acquired if a feeling of use, such as attaching [ which was able to fly / which is ], may be spoiled and it is too few.

[Procedure amendment 11]

[Document to be Amended] Specification

[Item(s) to be Amended] 0010

[Method of Amendment] Modification

[The contents of amendment]

[0010]

In the charge of washing of this invention, the arbitration component usually used at the charge of washing can be contained in the range which does not spoil the effectiveness of this invention besides the above-mentioned component. As such an arbitration component, for example Hydrocarbons, such as squalane, vaseline, and a micro crystallin wax Ester, such as jojoba oil, carnauba wax, and oleic acid octylidodecyl Triglyceride, such as olive oil, beef tallow, and coconut oil, dimethicone, and FEMECHIKON, Fatty acids, such as silicone, such as AMOJIMECHIKON, stearin acid, oleic acid, and a RICHINO lane acid, Higher alcohol, such as oleyl alcohol, stearyl alcohol, and an octyl dodecanol, Anionic surface active agents, such as sulfo succinate and polyoxyethylene sodium alkylsulfate Cationic surface active agents, such as amphoteric surface active agents, such as an alkyl betaine salt, and dialkyl ammonium salt A sorbitan fatty acid ester, fatty acid monoglyceride, these polyoxyethylene addition products, Nonionic surface active agents, such as polyoxyethylene alkyl ether and polyoxyethylene fatty acid ester Polyhydric alcohol other than dipropylene glycols, such as a polyethylene glycol, a glycerol, and 1,3-butanediol, or an isoprene glycol Cool components, such as thickening and gelling agents, such as xanthan gum, Cyamoposis Gum, a carboxyvinyl polymer, cation-ized cellulose ether, and cation-ized Cyamoposis Gum, an antioxidant, an ultraviolet ray absorbent, perfume, color material, antiseptics, fine particles, and menthol, etc. can illustrate preferably. The charge of washing of this invention can be manufactured by processing these components according to a conventional method.

[Procedure amendment 12]

[Document to be Amended] Specification

[Item(s) to be Amended] 0012

[Method of Amendment] Modification

[The contents of amendment]

[0012]

<Example 1>

According to the formula shown below, the cleansing cream 1 for a pre shampoo which is the charge of washing of this invention was created. That is, the formula component was heated at 70 degrees C, was stirred, and was solubilized, stirring cooling was carried out, and the cleansing cream 1 for a pre shampoo was obtained. The example 3 of a comparison which permuted separately the example 1 of a comparison which permuted all the VANIRIRU butyl ether of this thing by water, the example 2 of a comparison which permuted L-menthol and capsicum tincture by water and VANIRIRU butyl ether, and L-menthol and capsicum tincture by water was also created. Examination which removes a lipid was performed from the scalp of the man of oily skin using these. That is, it washed away, after sprinkling 5ml of cleansing creams 1 of this invention and massaging the one half of the head well. The one half of the remaining head was similarly processed in the example 1 of a comparison, and the photograph after these processings was taken with the video microscope. The photograph of a part processed with cleansing cream 1 to drawing 1 is shown. The photograph after processing the photograph after processing the photograph of a part processed in the example 1 of a comparison to drawing 2 in the example 2 of a comparison to drawing 3 in the example 3 of a comparison to drawing 4 is shown. When these are compared, it turns out that the processing by cleansing cream 1 which is the charge of washing of this invention has removed lipid dirt intentionally. It also turns out that this is what is depended on the synergism of the VANIRIRU butyl ether which is the indispensable component of this invention, and L-menthol which is the matter which has a teleangiectasia operation. Moreover, the desirable sense of heat was sensed for the charge of washing of this invention.

Dipropylene glycol 15 Weight section

Ethanol 15 Weight section

Carboxyvinyl polymer The 0.5 weight sections

10% caustic potash water solution 2 Weight section

Silicone emulsion 3 Weight section

L-menthol 1 Weight section

Xanthan gum The 0.1 weight sections

Sodium lactate The 0.1 weight sections

Deca glycerol lauric-acid ester 10 Weight section

Capsicum tincture 1 Weight section

VANIRIRU butyl ether The 0.1 weight sections

Water The 52.2 weight sections

[Procedure amendment 13]

[Document to be Amended] Specification

[Item(s) to be Amended] 0013

[Method of Amendment] Modification

[The contents of amendment]

[0013]

<Example 2>

How depending on which the sebum dirt the case where it pretreated and shampoos with the cleansing cream 1 of the above-mentioned example 1 using the shampoo of a formula shown below, and at the time of shampooing without pretreatment remains was observed. The one half of the head of the panelist of oily skin pretreated with cleansing cream 1, and without pretreating, the remaining one half shampooed its hair successively with the following shampoo, and observed with the video macro scope. A photograph is shown, although its hair was shampooed with a shampoo after pretreating to drawing 5 </U> and its was shampooed without pretreatment with a shampoo to drawing 6 in the photograph. This shows the removal effectiveness of the cleansing cream lipid for the pre shampoo of this invention.

(Shampoo formula)

Polyoxyethylene sodium lauryl sulfate 10 Weight section

Polyoxyethylene palm-oil-fatty-acid monoethanolamide 5 Weight section

Sodium lauryl sulfate 2 Weight section

1,3-butanediol 10 Weight section

Water 73 Weight section

[Procedure amendment 14]

[Document to be Amended] Specification

[Item(s) to be Amended] 0017

[Method of Amendment] Modification

[The contents of amendment]

[0017]

<Example 5>

The sodium lactate in the charge of washing of this invention of an example 1 was permuted by water, and the charge of washing of this invention was created. this thing -- the scalp -- although excelled in the operation which removes the sebum of the section, it was less than the charge of washing of an example 1.

[Procedure amendment 15]

[Document to be Amended] Specification

[Item(s) to be Amended] 0018

[Method of Amendment] Modification

[The contents of amendment]

[0018]

[Effect of the Invention]

According to this invention, a sebum removal operation is raised and maintenance of hair and depilatory prevention are provided with the useful charge of washing.

It can carry out.

[Procedure amendment 16]

[Document to be Amended] Specification

[Item(s) to be Amended] Easy explanation of a drawing

[Method of Amendment] Modification

[The contents of amendment]

[Brief Description of the Drawings]

[Drawing 1] It is drawing showing the result processed with the cleansing cream 1 of an example 1. (Drawing substitution photograph)

[Drawing 2] It is drawing showing the result processed in the example 1 of a comparison. (Drawing substitution photograph)

[Drawing 3] It is drawing showing the result processed in the example 2 of a comparison. (Drawing substitution photograph)

[Drawing 4] It is drawing showing the result processed in the example 3 of a comparison. (Drawing substitution photograph)

[Drawing 5] After [ in an example 2 ] pretreating, it is drawing showing the shampooed result. (Drawing substitution photograph)

[Drawing 6] It is drawing showing the result shampooed without pretreatment in an example 2. (Drawing substitution photograph)

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[Translation done.]